



LYNX Blue Line Extension HIA Workshop

January 28, 2015

Katherine Hebert, Dick Winters



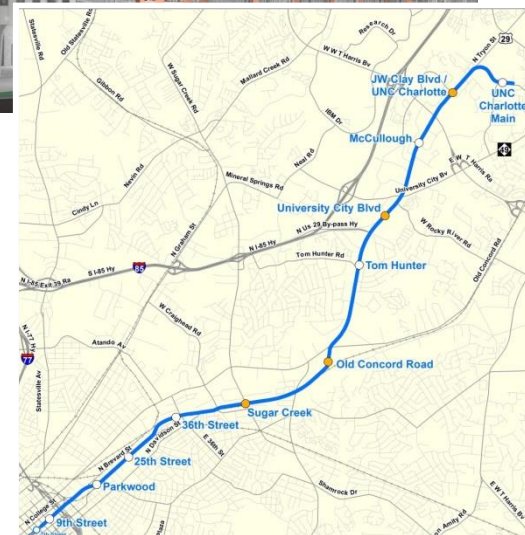
Agenda

- Registration, Welcome, and Introductions
- Overview of LYNX Blue Line Extension
- Introduction to HIA Process
- Overview of Health in Mecklenburg County
- Tour of Site
- Small Group Activity





LYNX Blue Line Extension Health Impact Assessment UNC Charlotte January 28, 2015



Sayra Brynn - Charlotte Area Transit System, Marketing and Communications

- LYNX BLE Construction Update

Jason Lawrence – Charlotte Area Transit System, Transit Planning

- LYNX Blue Line
- Environmental Impact Statement
- Bus-Rail Integration
- Toby Creek Greenway
- Northeast Corridor Infrastructure Program

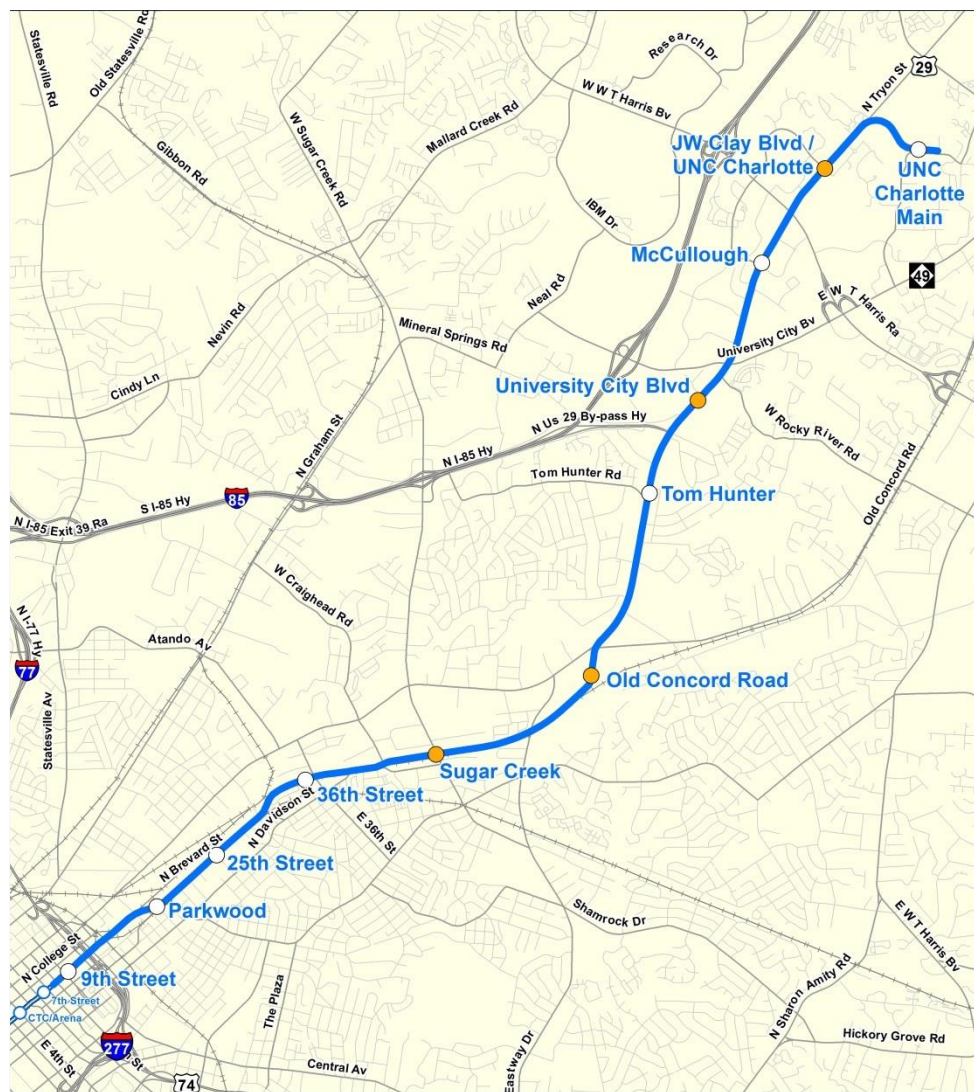
Mandy Vari - Charlotte Mecklenburg Planning Department

- Station Area Planning



LYNX Blue Line Extension (BLE) Project Overview

- 9.3 miles, 11 stations
- 4 park and ride facilities
- Approximately 3,100 parking spaces
- Accommodates 3-car trains
- 25,000+ daily riders
- Improvements to North Tryon St.
- Connects UNC Charlotte campuses
- 22 minute commute from Uptown to UNC Charlotte
- Initial peak period service 7.5 minute frequency
- Connecting bus services
- Revenue service in 2017
- Fare will be the Local Fare at the time of opening



UPTOWN

- Closures
 - East 8th Street
- Overhead Power Relocation
 - (Temporary)
- Installing Storm Drainage & Relocating Sanitary Sewer
 - 7th to 9th Streets

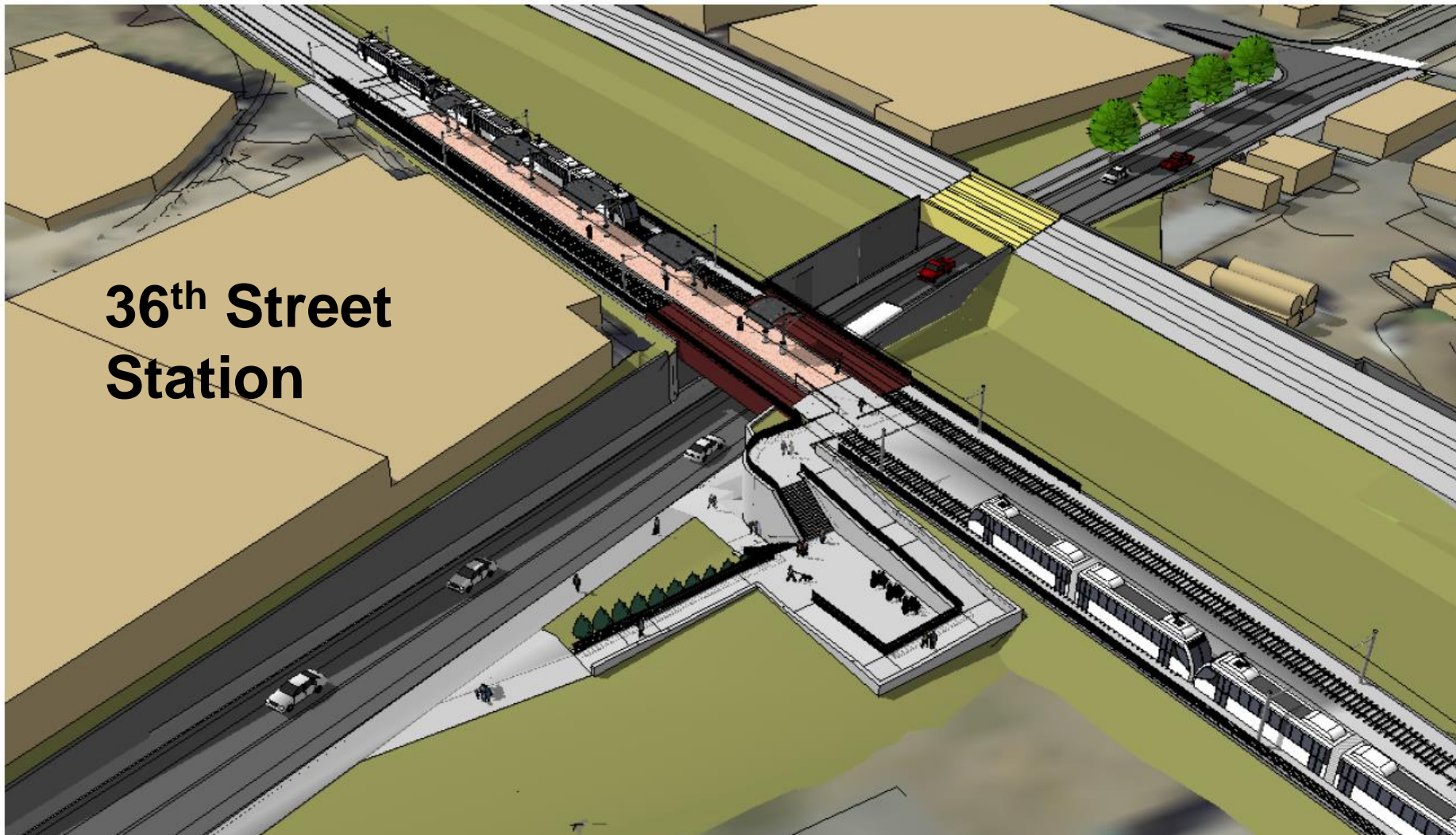


Uptown to Old Concord

- Closures
 - 16th Street
 - E 36th Street
 - Eastway Drive
- Installing Storm Drainage (North Yard)
- Waterline Installation
- Retaining Wall Construction
- Old Concord Station Foundation
- Grading for Parkwood Station

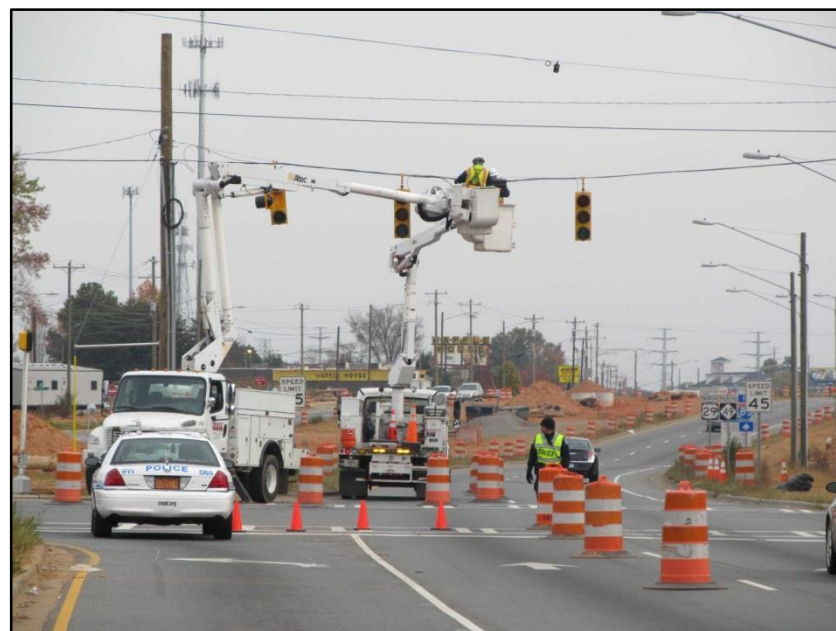
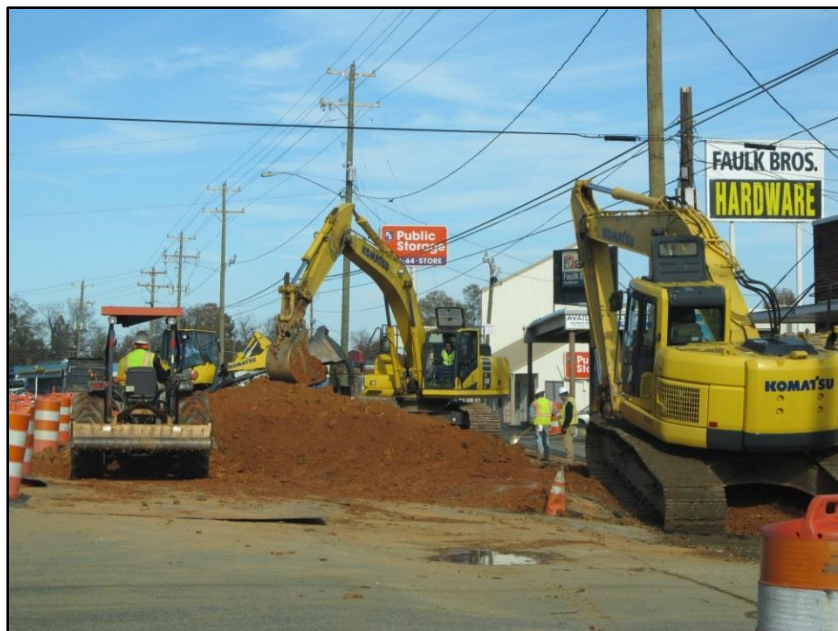


36th Street Station



Along North Tryon:

- Private utility and traffic signal relocations continue along N. Tryon St.
- Waterline work along Northbound N. Tryon St. from Old Concord Rd. to Heathway
- Upcoming construction of new roadway outside of travel lanes

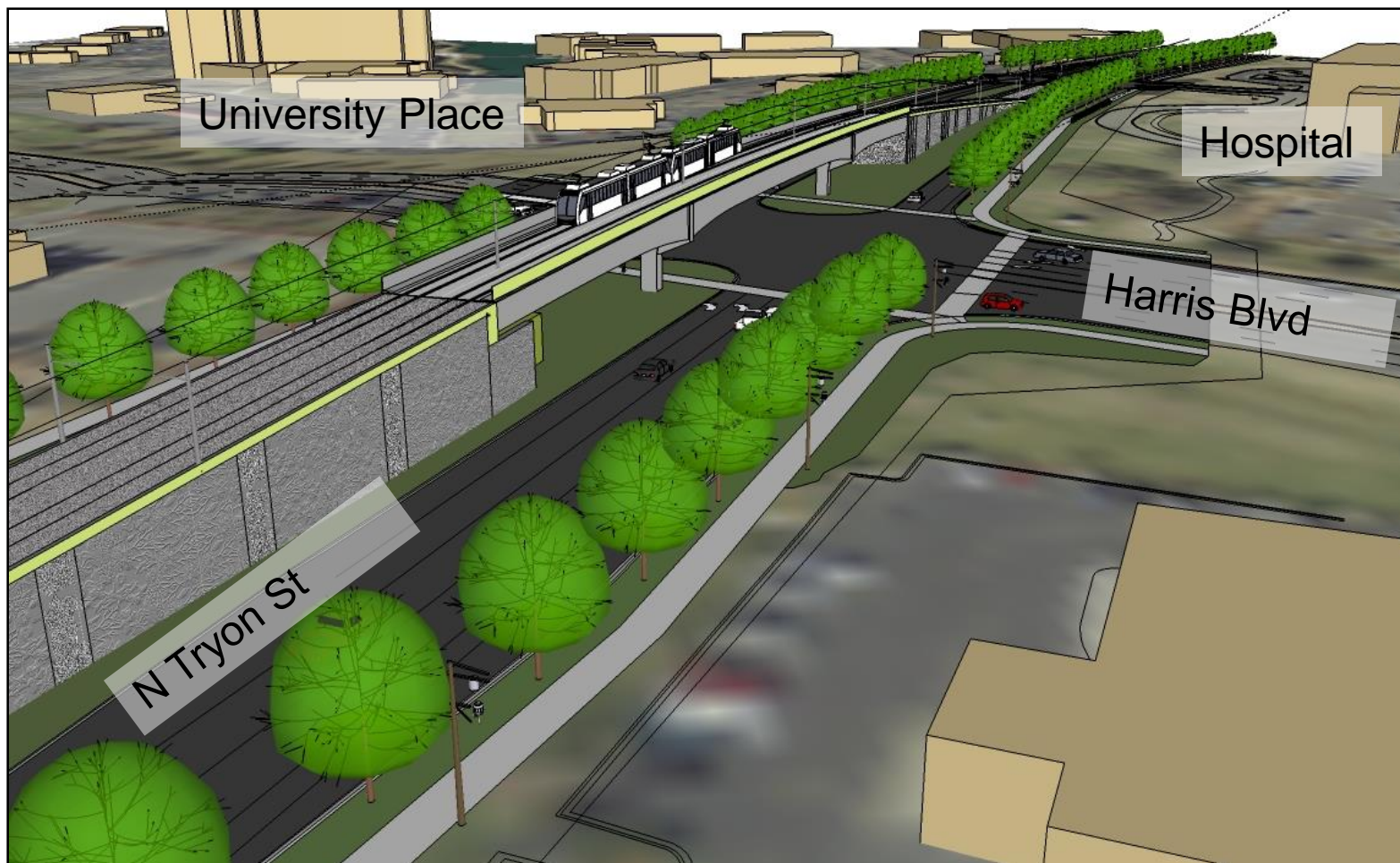


Construction continues on retaining walls along the alignment:

- JW Clay to JM Keynes
- Grove Lake to Institute Circle
- Barton Creek to Grove Lake



Light rail bridge over W.T. Harris Boulevard



UNC Charlotte station area:

- Building light rail bridge across Toby Creek
- Hauling in fill & grading
- Installing storm drainage



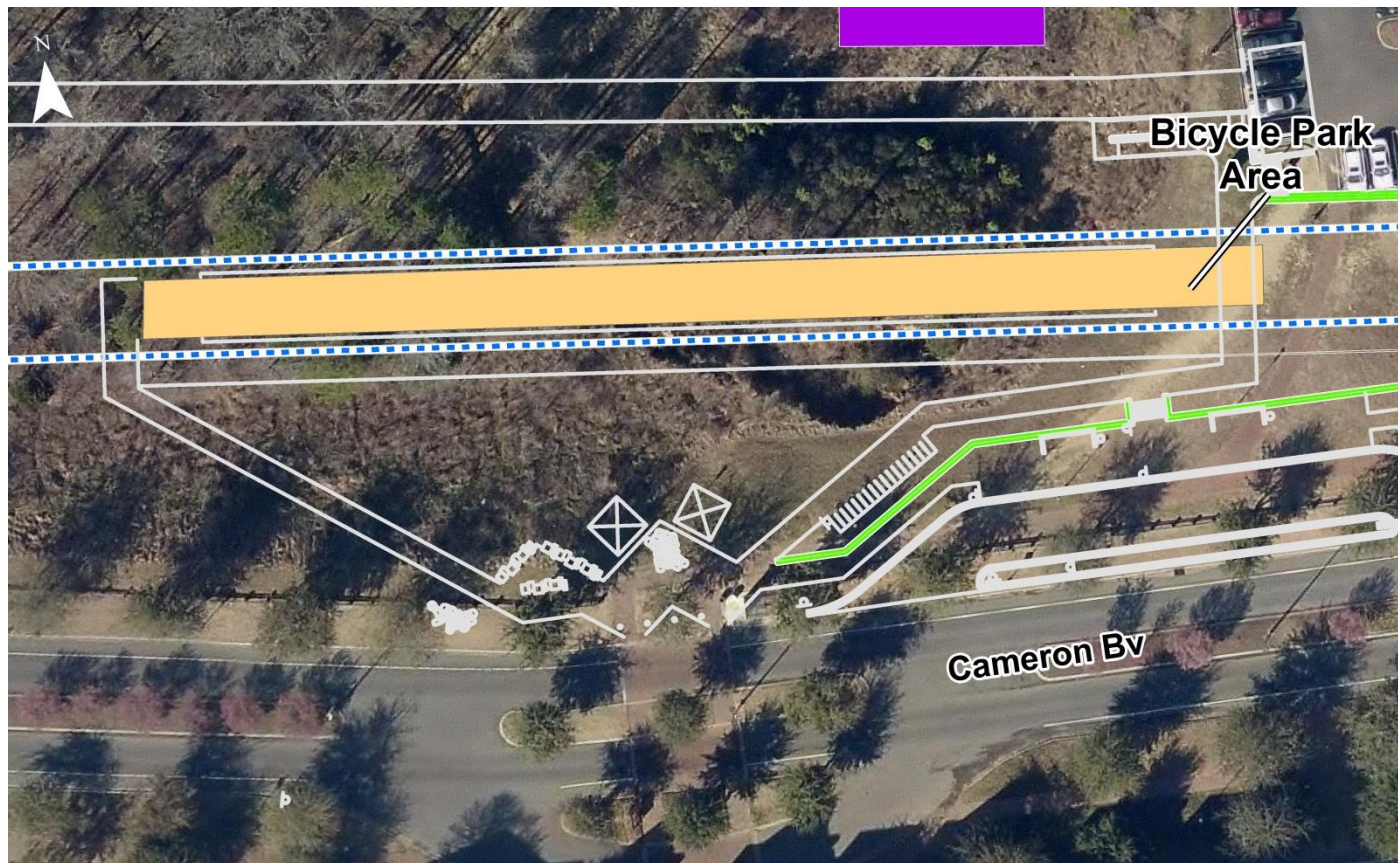
JW Clay/UNC Charlotte



- 5 levels with approximately 800 spaces for cars
- 14 covered bicycle spaces
- 2 bus bays
- A pedestrian bridge on the third level connecting the parking deck to the north end of the station platform
- 7 retail spaces

UNC Charlotte Main

- Bike storage space for up 32 bikes
- 2 bus bays
- Pedestrian connections to Cameron Blvd



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CATS Customer Service: 704-336-RIDE (7433)

City of Charlotte Customer Service: 311

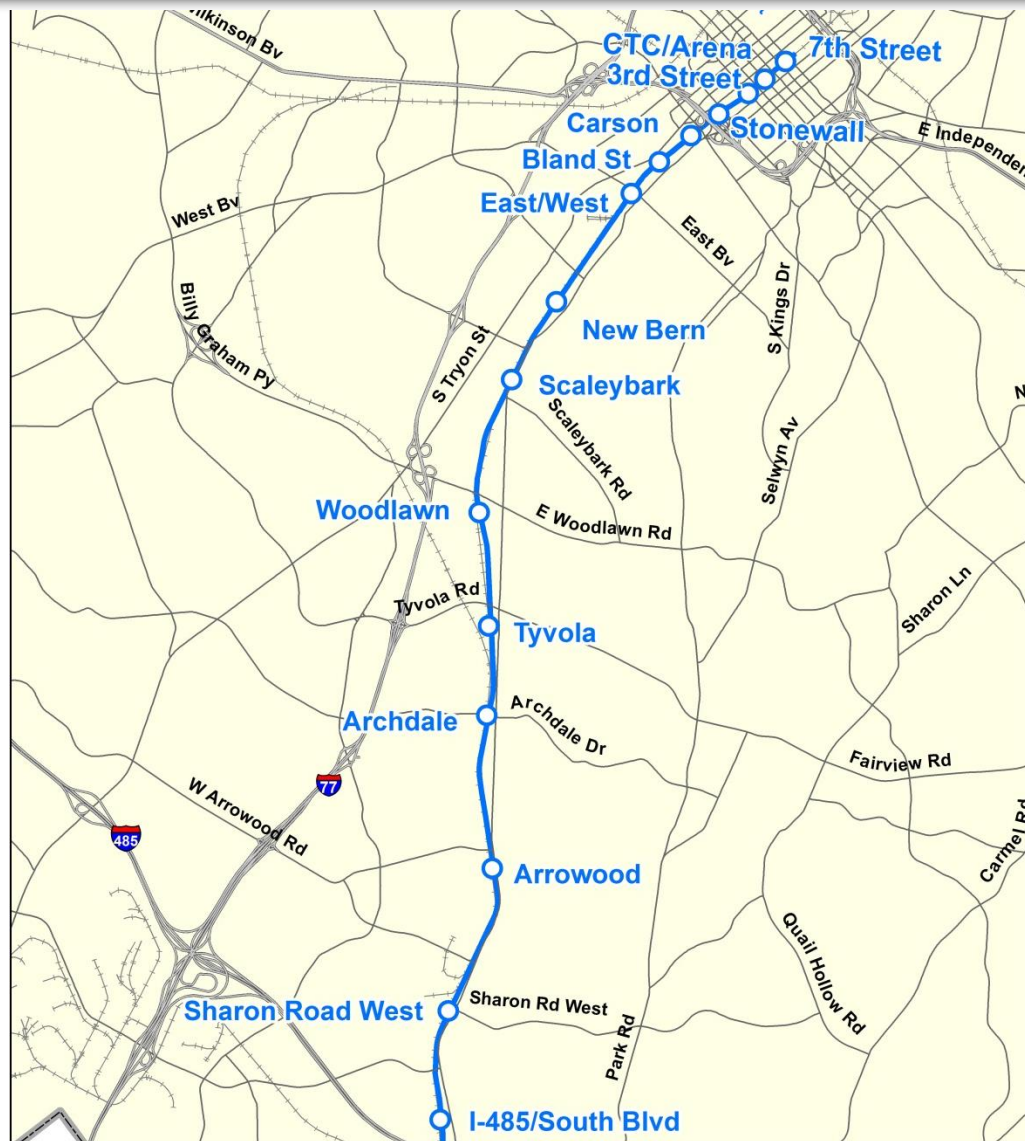
www.ridetransit.org

www.charlottefuture.com

Be Informed. Be Connected. Be In The Know.

What brought us to this point?

- 1998 2025 Transit Land Use Plan
- 2002 Transit System Plan
- 2006 Transit System Plan update
- 2007 LYNX Blue Line opened
- LYNX Blue was originally projected to have 9,000 daily riders upon opening
- Ridership has consistently ranged from 14,000-16,000 daily riders since opening



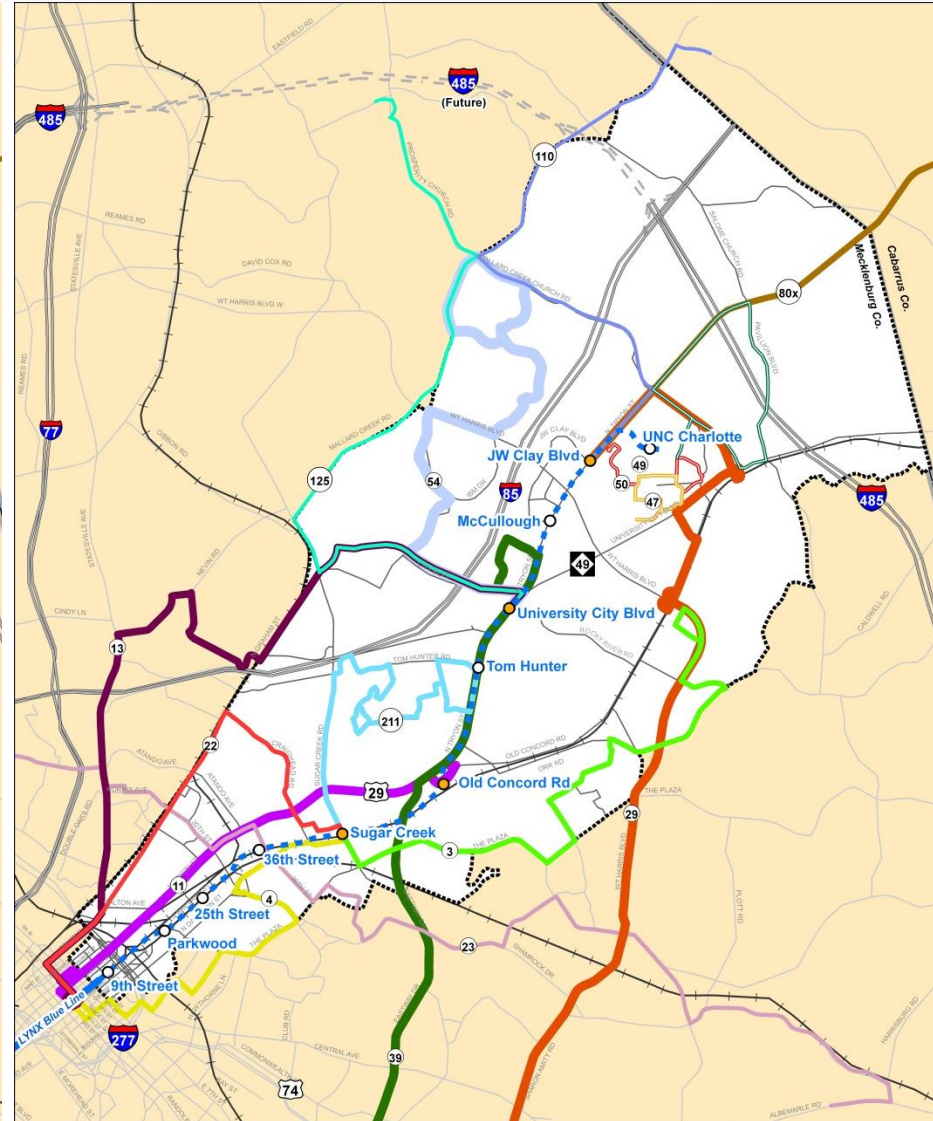
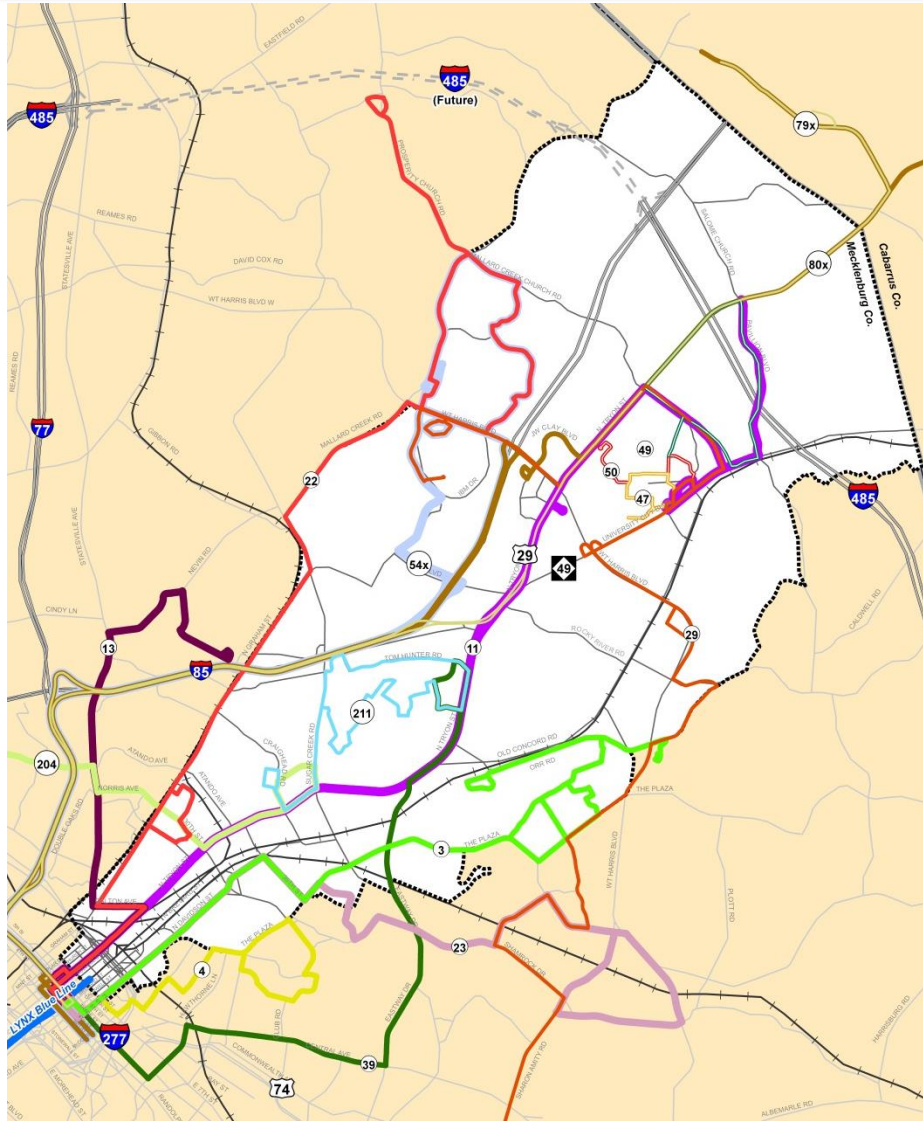
- A Final Environmental Impact Statement (FEIS) was finalized in 2011
- What is a FEIS?
- Applicants for federal funding of major transit projects are required to complete an environmental document, called an Environmental Impact Statement (EIS). This document, prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, is a comprehensive assessment of the environmental impacts of the project alternatives.
- The Final EIS evaluated the social, economic, environmental and transportation effects associated with the LYNX BLE light rail project. The Final EIS also includes responses to comments received on the Draft EIS, and planned mitigation measures to reduce anticipated impacts.

	PE Prediction (2013 Build)				FD Prediction (2017 Build)			
Station	Walk	Drive	Kiss-Ride	Total	Walk	Drive	Kiss-Ride	Total
I-485/N. Tryon	89	211	143	443	0	0	0	0
Mallard Creek	199	10	10	218	0	0	0	0
UNC Charlotte	753	1	178	931	1,733	0	213	1,946
JW Clay Blvd.	317	1	6	323	900	664	222	1,786
UNCC Area	1,268	12	193	1,473	2,632	664	435	3,732
McCullough	185	0	3	188	507	0	53	560
City Blvd.	148	91	29	268	0	0	0	0
University City Blvd.	181	43	61	285	832	1,689	85	2,606
Tom Hunter	326	31	18	374	673	0	53	726
Old Concord Road	214	62	46	322	302	357	62	720
Sugar Creek	305	131	43	479	668	847	290	1,805
NE Inner PNR	1,358	358	200	1,916	2,982	2,892	542	6,417
36th Street	446	0	6	452	1,262	1	36	1,299
25th Street	212	0	3	215	335	0	5	340
Parkwood	157	0	1	159	323	0	6	329
NE Inner Sta.	815	0	10	825	1,920	1	47	1,968
9th Street	138	0	21	159	983	0	49	1,032
7th Street	528	0	106	634	3,066	0	204	3,270
CTC	2,374	2	102	2,478	5,230	17	377	5,624
3rd Street	308	0	33	341	1,587	13	127	1,727
Stonewall	0	0	0	0	1,427	4	91	1,522
CBD Sta.	3,348	2	262	3,612	12,293	34	848	13,175
Carson	148	0	1	149	758	0	37	795
Bland	322	0	3	325	619	0	32	651
East-West	451	0	6	457	1,337	0	60	1,397
New Bern	405	0	14	419	799	0	20	819
Southend Sta.	1,325	0	24	1,350	3,512	0	149	3,661
Scaleybark	206	63	8	277	457	280	207	944
Woodlawn	406	72	31	509	859	309	165	1,333
Tyvola	464	23	19	506	1,326	305	106	1,738
Archdale	314	20	12	346	562	60	55	677
Arrowood	460	48	16	525	1,029	272	59	1,360
Sharon W	393	45	31	470	771	300	86	1,157
Inner PnR Sta.	2,243	271	118	2,633	5,004	1,526	678	7,208
S I-485	350	137	24	512	578	1,500	84	2,162
Total	10,798	992	974	12,764	28,922	6,617	2,783	38,322

Bus-Rail Integration Plan Strategic Approach

In September 2011 a LYNX BLE Bus-Rail Integration Plan was developed. The purpose of the plan was to document the service adjustments to Northeast Corridor bus routes that would be affected by the implementation of the LYNX BLE. In order to begin the service planning for Northeast Corridor Bus-Rail routes, the development of a service philosophy and goals were established. Building upon the lessons learned from the LYNX Blue Line Bus-Rail Integration as well as an understanding of the Northeast Corridor needs, the following strategic approach was developed:

- Review ridership data to understand the existing areas of usage for each Bus/Rail route.
- Maintain trips for customers so that the majority of existing bus trips could still be completed after integration with the BLE.
- Although transfers to rail would be created, routes should be designed to limit the number of transfers.
- Utilize the BLE to decrease overall trip time for bus customers.
- Develop routes that would attract choice customers without impacting transit dependent customers.
- Reduce future bus operating costs without decreasing the overall service area and quality of transit service within the Northeast Corridor.



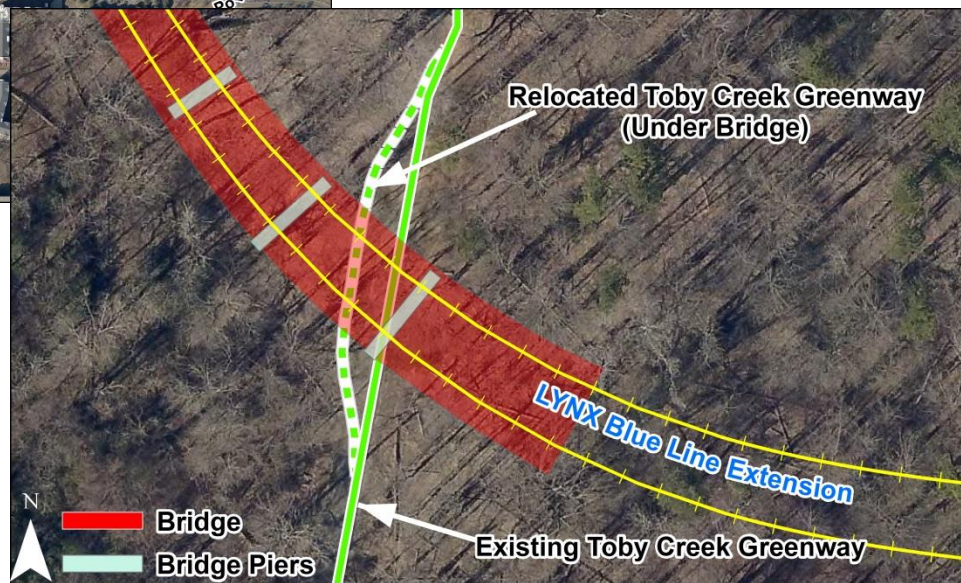
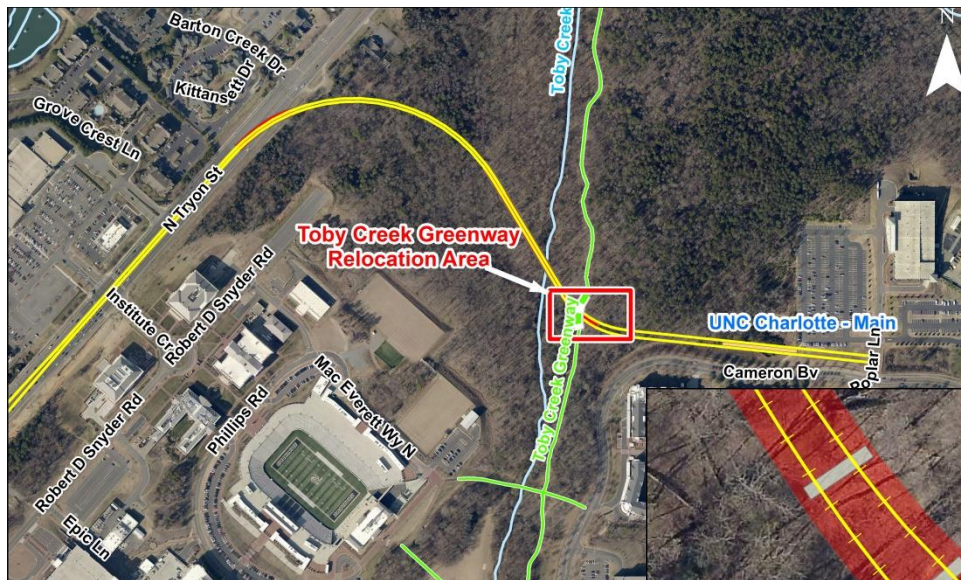
LYNX BLE Bus-Rail Modifications to Span of Service of Existing Bus Routes

Routes	Span of Service					
	Weekdays		Saturday		Sunday	
	Existing	LYNX BLE Bus/Rail	Existing	LYNX BLE Bus/Rail	Existing	LYNX BLE Bus/Rail
3 The Plaza	5:11 am 1:54 am	M	5:53 am 1:55 am	M	5:39 am 1:22 am	M
4 Country Club	5:40 am 1:04 am	M	5:44 am 12:58 am	M	6:40 am 11:46 pm	M
11 North Tryon	4:58 am 2:05 am	M	5:38 am 2:04 am	M	5:52 am 1:03 am	M
13 Nevin Road	5:10 am 1:01 am	M	5:30 am 1:10 am	M	7:42 am 12:56 am	M
22 Graham Street	5:06 am 1:49 am	M	6:38 am 1:43 am	M	6:38 am 12:45 am	M
23 Shamrock Drive	5:10 am 1:59 am	M	5:23 am 1:56 am	M	6:25 am 1:02 am	M
29 UNCC	5:53 am 7:54 pm	M	8:10 am 6:45 pm	M	---	---
39 Eastway Drive	5:35 am 2:06 am	M	5:47 am 1:32 am	M	6:26 am 7:29 pm	M
47 UNC-Charlotte Nugget*	7:30 am 10:00 pm	M	---	M	---	M
49 UNC-Charlotte Niner*	6:00 am 5:57 pm	M	---	M	---	M
50 UNC-Charlotte-CRI*	6:45 am 10:00 pm	M	---	M	---	M
54X University Research Park Express	5:40 am 9:20 am 3:37 pm 7:41 pm	5:06 am 11:15 pm	---	6:38 am 11:15 pm	---	6:38 am 11:15 pm
80X Concord Express	5:40 am 8:32 am 4:05 am 7:05 pm	M	---	M	---	M
110 Mallard Creek/Concord Mills	---	6:34 am 11:15 pm	---	7:08 am 11:15 pm	---	7:08 am 11:15 pm
125 Derita/Prosperity Church Road	---	6:44 am 11:15 pm	---	7:16 am 10:23 pm	---	7:10 am 10:17 pm
204 Lasalle	5:30 am 11:45 pm	---	7:25 am 10:11 pm	---	---	---
211 Hidden Valley	4:50 am 12:48 am	M	5:30 am 1:06 am	M	7:10 am - 11:59 pm	M
LYNX BLE	---	5:00 am 1:00 am	---	5:00 am 1:00 am	---	5:00 am 1:00 am

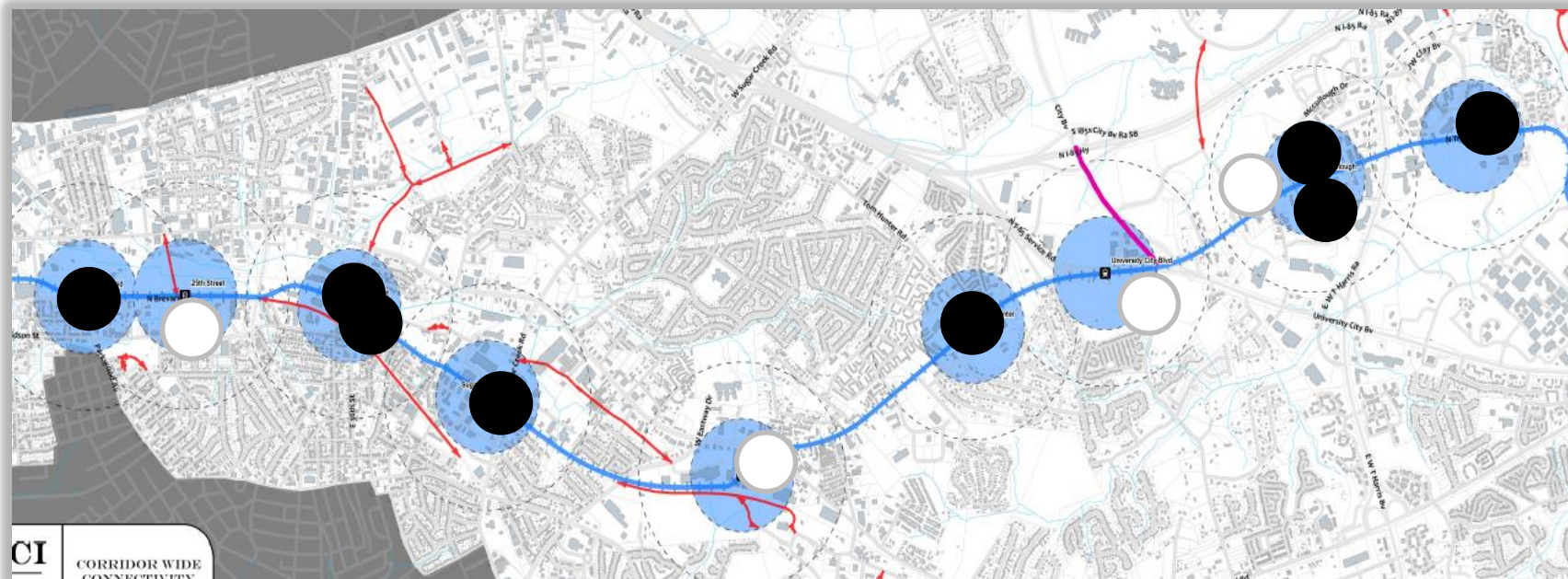
LYNX BLE Bus-Rail Headway Modifications to Existing Bus Routes

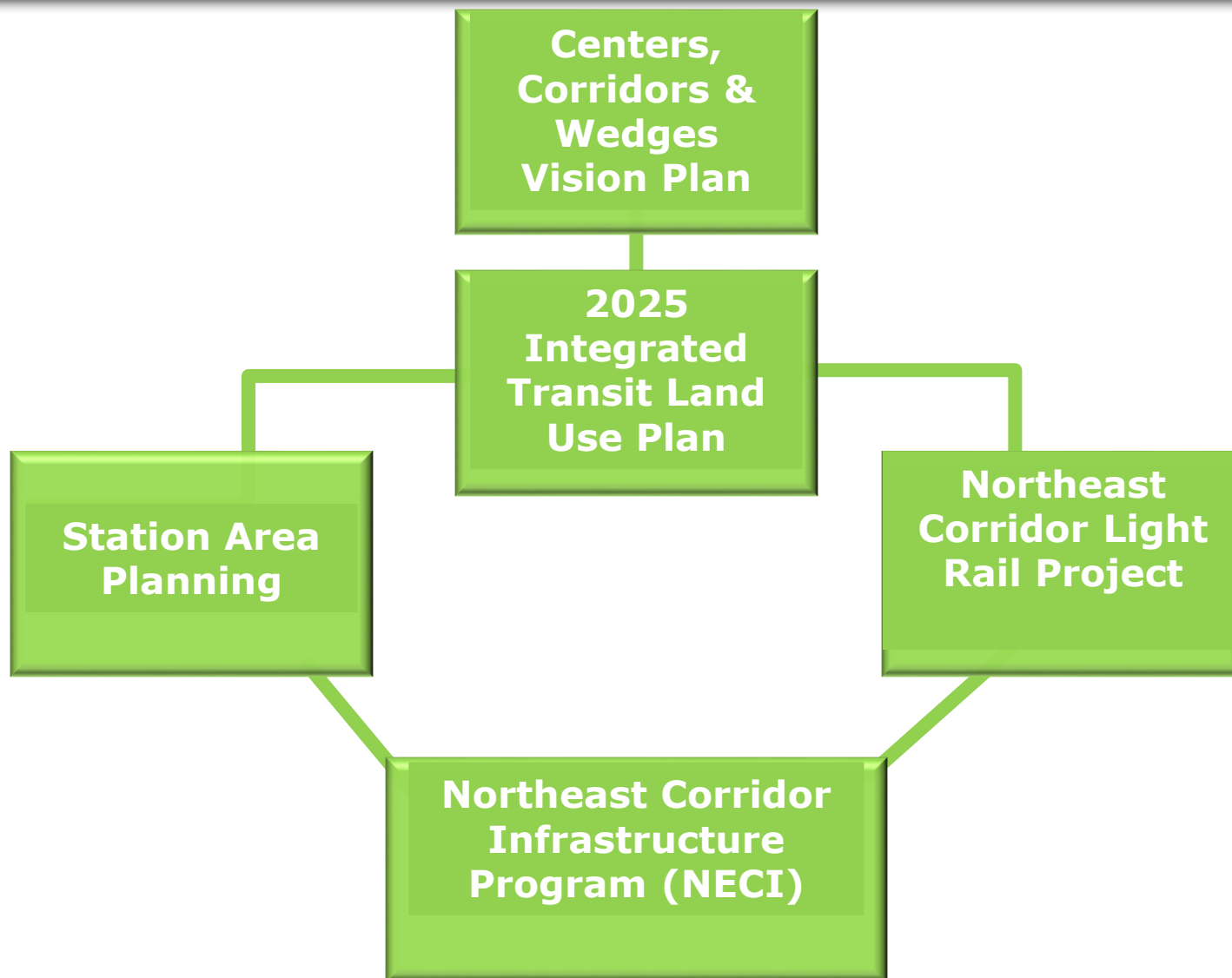
Route	Peak Headway (minutes)		Mid-Day Headway (minutes)		Night Headway (minutes)		Light Rail Station Served
	Existing	LYNX BLE Bus-Rail	Existing	LYNX BLE Bus-Rail	Existing	LYNX BLE Bus-Rail	
3	20	20	30	30	45	40	Sugar Creek
4	30	30	30	30	45	40	Sugar Creek
11	10	20	10	20	30	40	Old Concord Road
13	30	30	30	30	30	30	University City Blvd
22	30	30	30	30	40	40	Sugar Creek
23	20	20	30	30	45	40	36th Street
29	45	40	45	40	---	---	JW Clay Blvd
39	35	30	45	30	45	30	Old Concord Rd, Tom Hunter, and University City Blvd
47	20	20	20	20	20	20	UNC Charlotte
49	15	15	15	15	---	---	UNC Charlotte
50	15	15	15	15	30	30	UNC Charlotte
54x	12	30	---	60	---	---	University City Blvd
80x	20	20	---	---	---	---	JW Clay Blvd
110	n/a	30	n/a	30	n/a	60	JW Clay Blvd
125	n/a	30	n/a	30	n/a	40	University City Blvd
204*	30	---	30	---	60	---	---
211	20	20	20	20	30	40	Sugar Creek and Tom Hunter

Toby Creek Greenway Relocation



Northeast Corridor Infrastructure Program (NECI)





NECI Program Goals

Improve Accessibility

- *Provide pedestrian, bicycle and vehicular connections to light rail stations.*



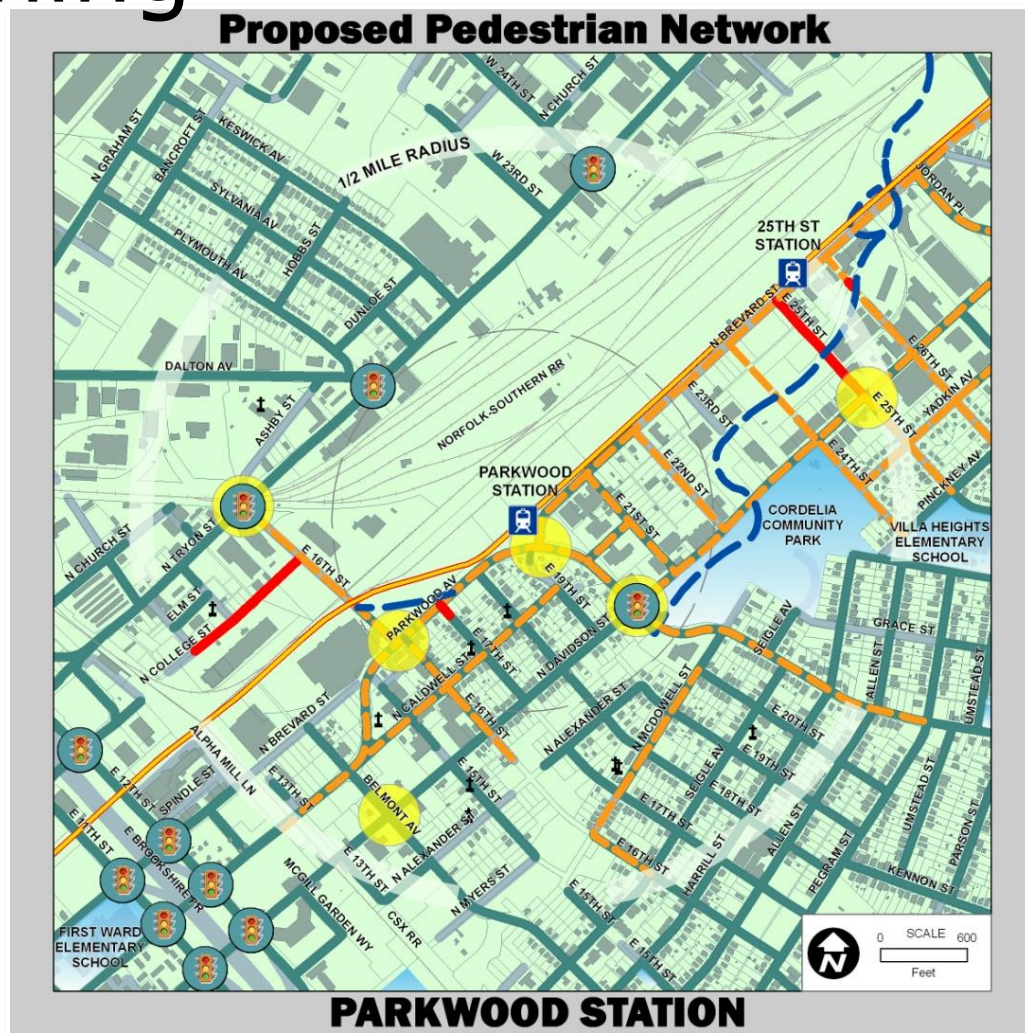
Promote Economic Development

- *Provide infrastructure to support and encourage transit supportive development*



Conceptual Planning

- ✓ *Street Network*
- ✓ *Pedestrian Network*
- ✓ *Bicycle Network*
- ✓ *Urban Design Concepts*





Project Types

- ✓ *Streets*
- ✓ *Intersections*
- ✓ *Sidewalks/crosswalks*
- ✓ *Bicycle facilities*
- ✓ *Streetscape & public space*
- ✓ *Storm water*
- ✓ *Water & sewer*



Arrowood Road at Old Pineville Road

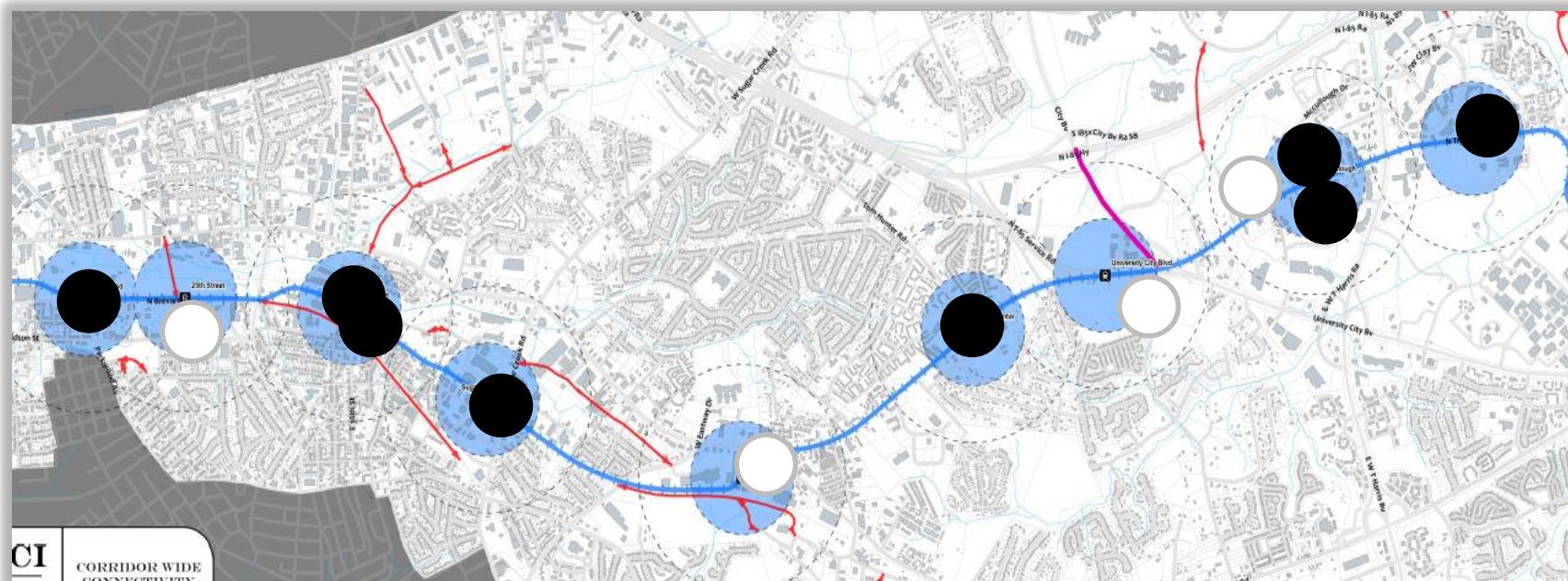


Archdale Road



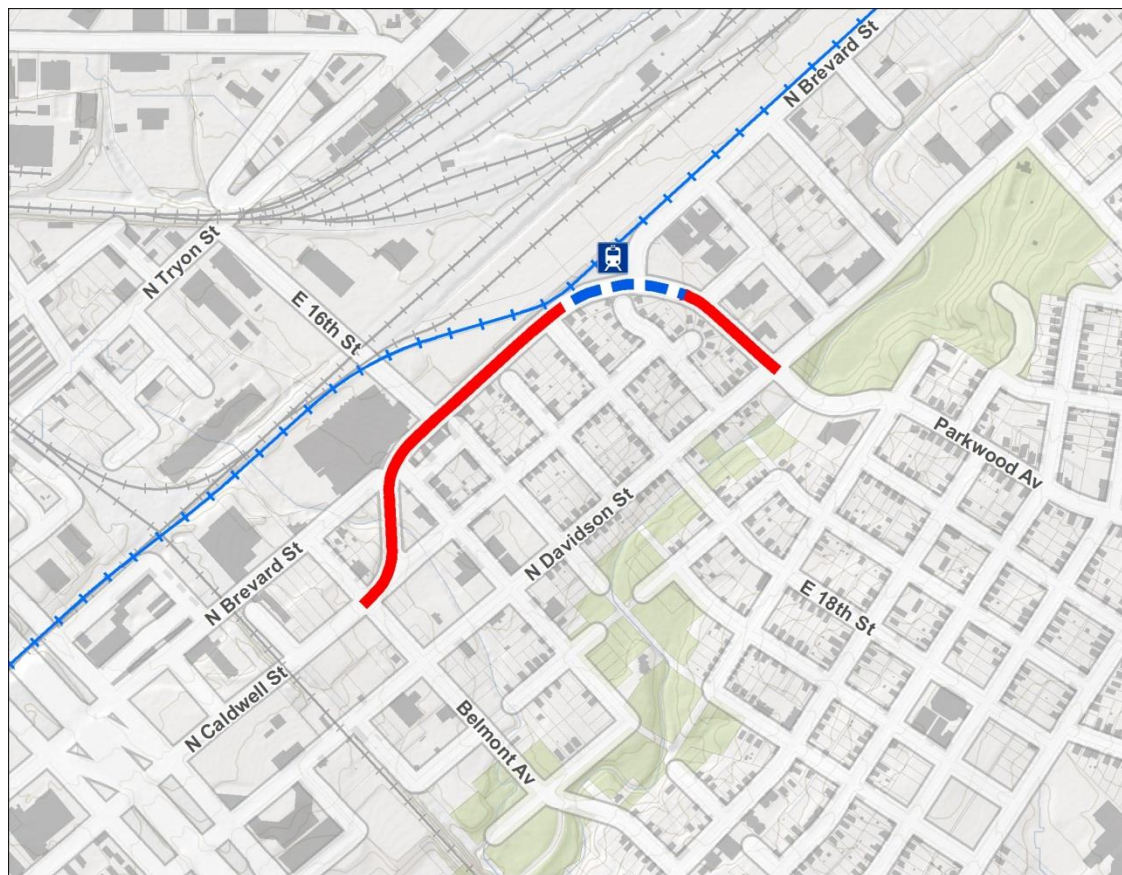
Dewitt Lane Extension

Northeast Corridor Infrastructure Program *Proposed projects*



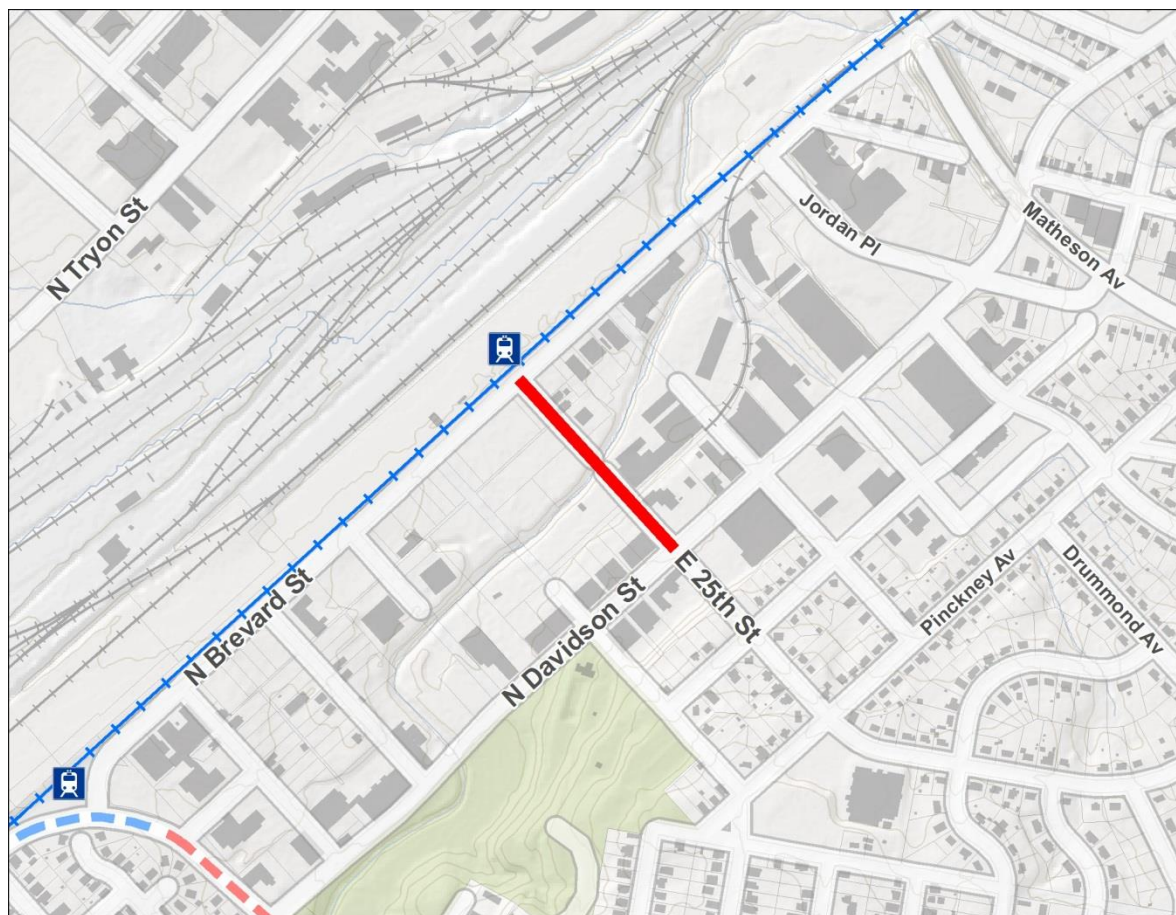
Parkwood Avenue Streetscape

- Street improvements may include bicycle lanes, sidewalks, landscaping, lighting and crosswalks
- Improves access to 16th St., Davidson St.



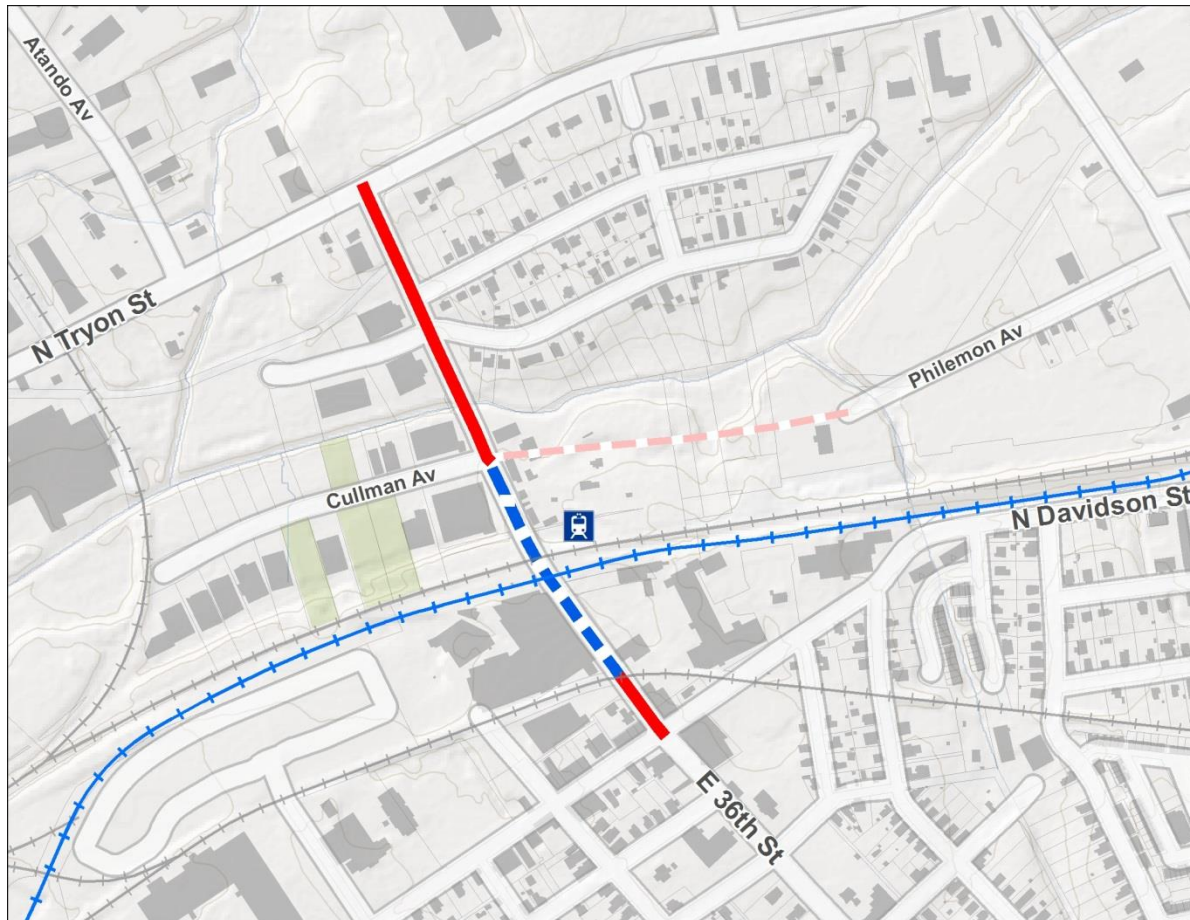
25th Street Extension

- New street connecting Brevard St. to Davidson St.
- New bridge to include bicycle lanes, sidewalks, landscaping, lighting



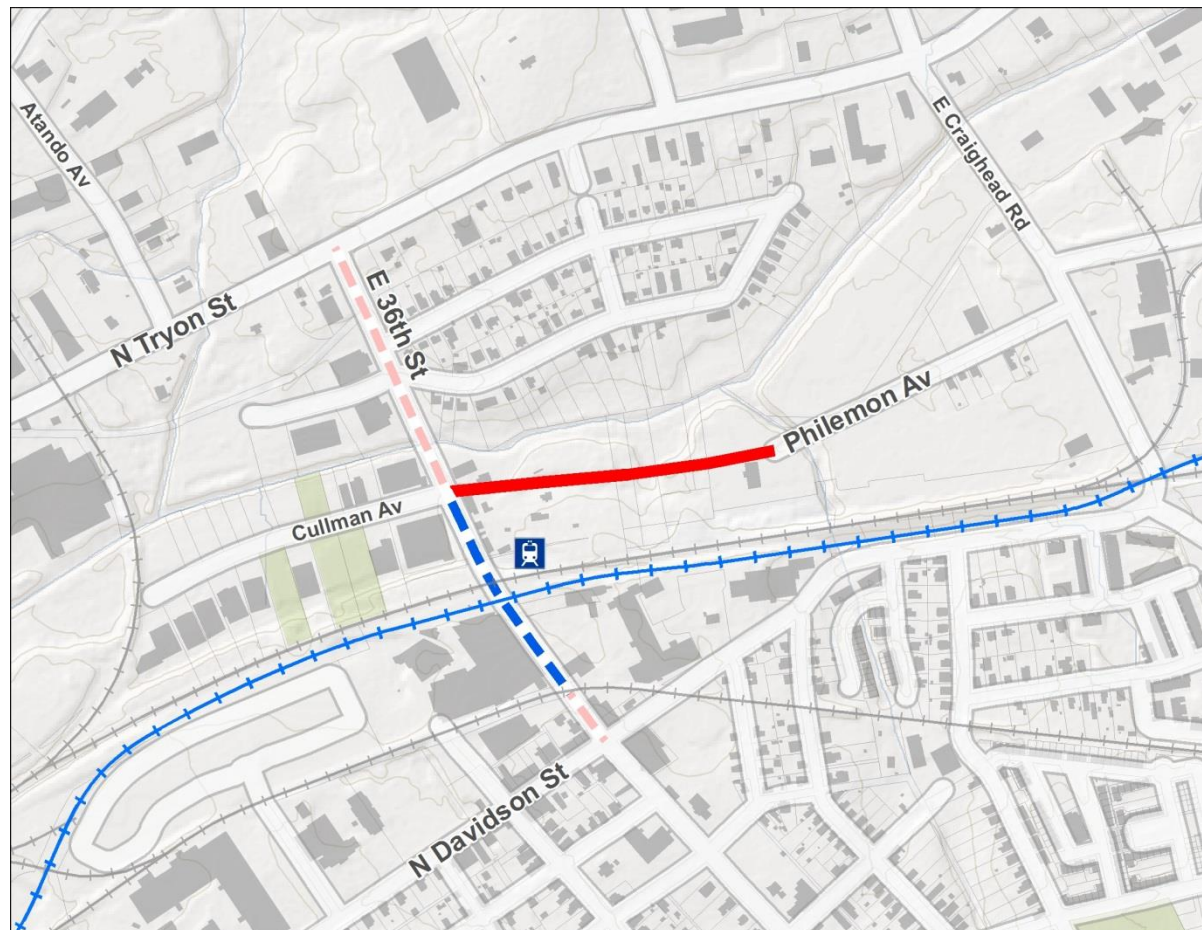
North Tryon Street and 36th Street Streetscape

- Extends beyond BLE improvements
- May include bicycle lanes, sidewalks, landscaping, lighting and crosswalks
- Improves access to N. Tryon St. and Davidson St.



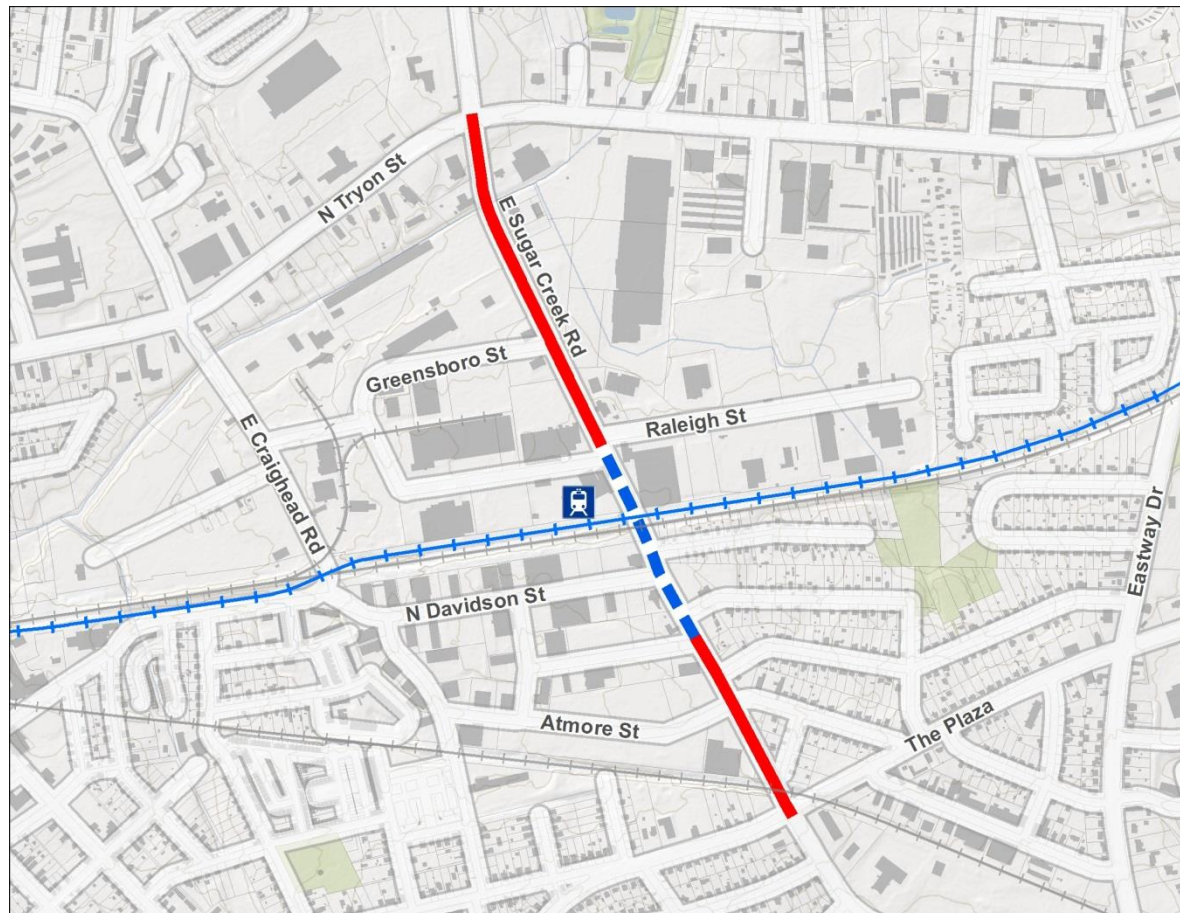
Philemon Extension

- New street connecting 36th St to Craighead Rd.
- Restores access lost at Davidson/Craighead



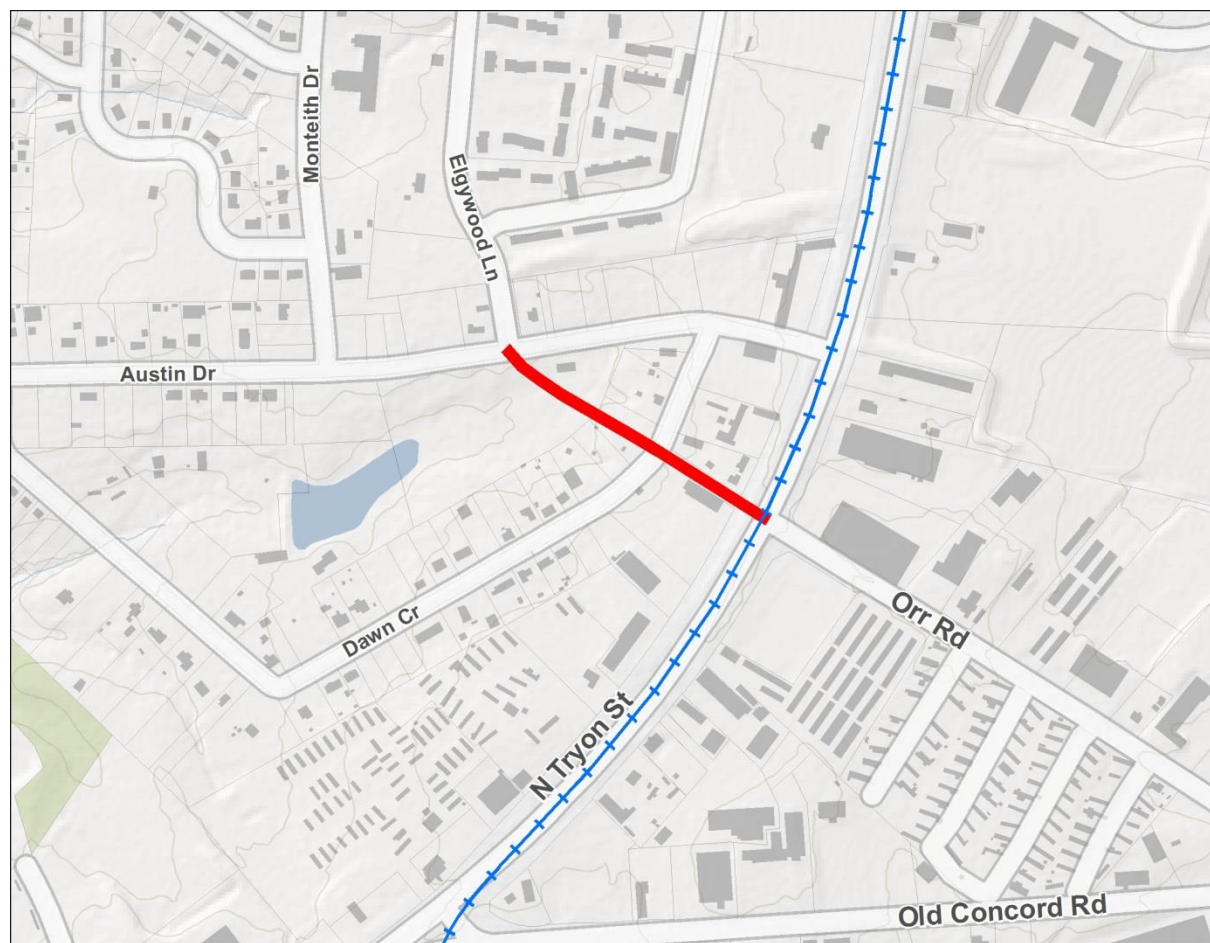
Sugar Creek Streetscape

- Ties in to NCDOT grade separation project
- Improvements may include bicycle lanes, sidewalks, landscaping, lighting and crosswalks.
- Improves connections to Tryon St. and The Plaza



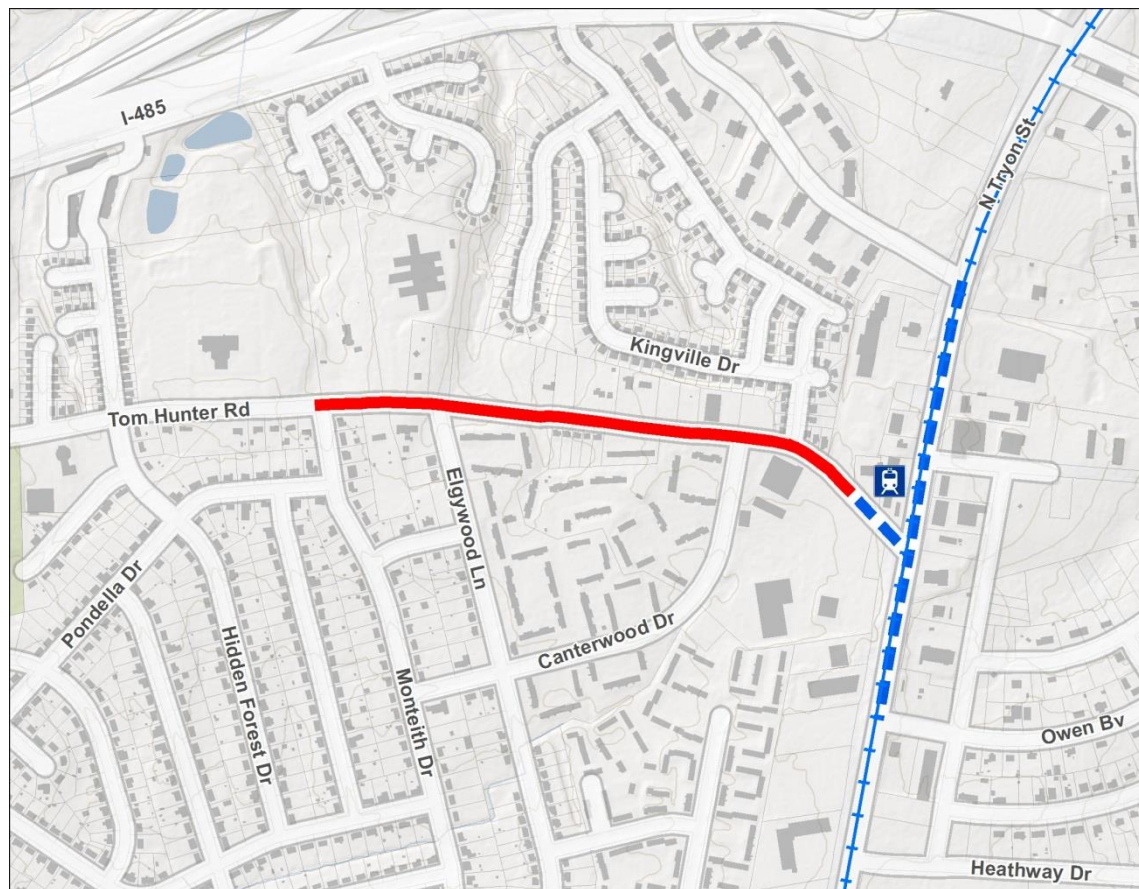
Orr Road

- Restores left turn access to Hidden Valley neighborhood
- Direct connection to Elgywood Ln.



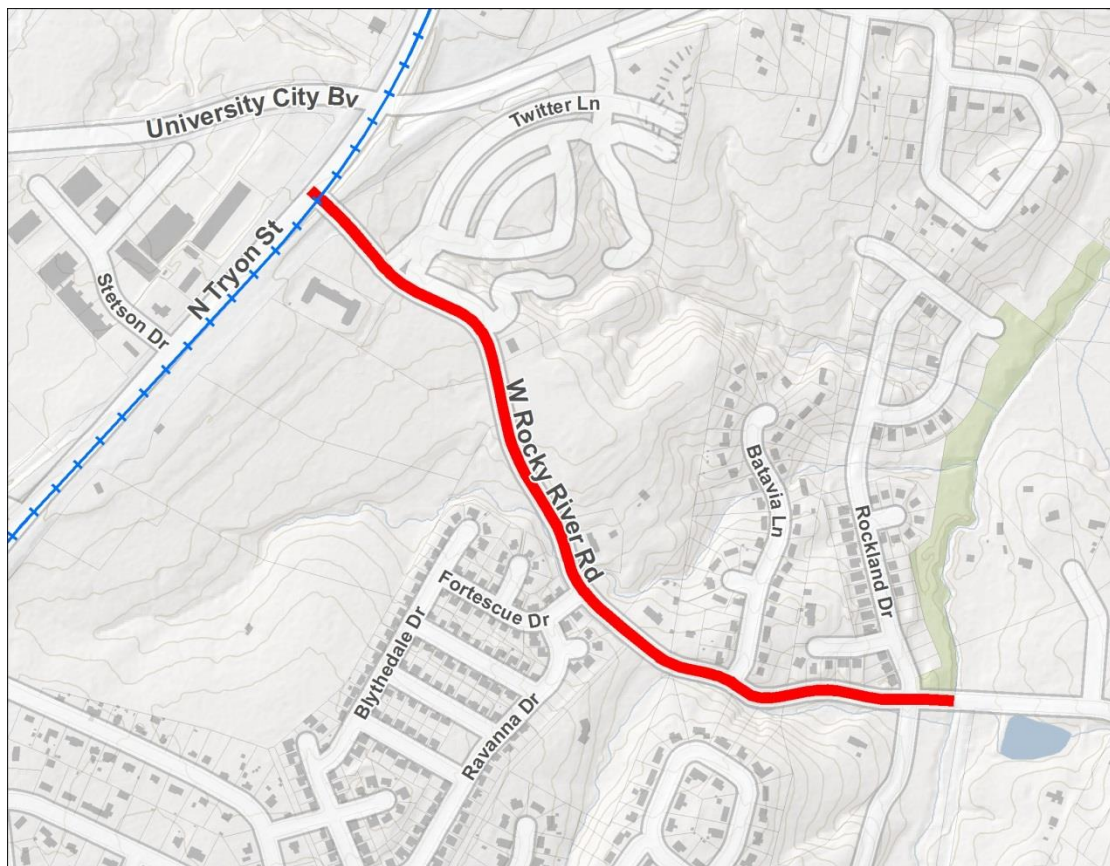
Tom Hunter Road Streetscape

- Improvements may include bicycle lanes, sidewalks, landscaping, lighting and crosswalks.
- Improved connections to Monteith, Elgywood



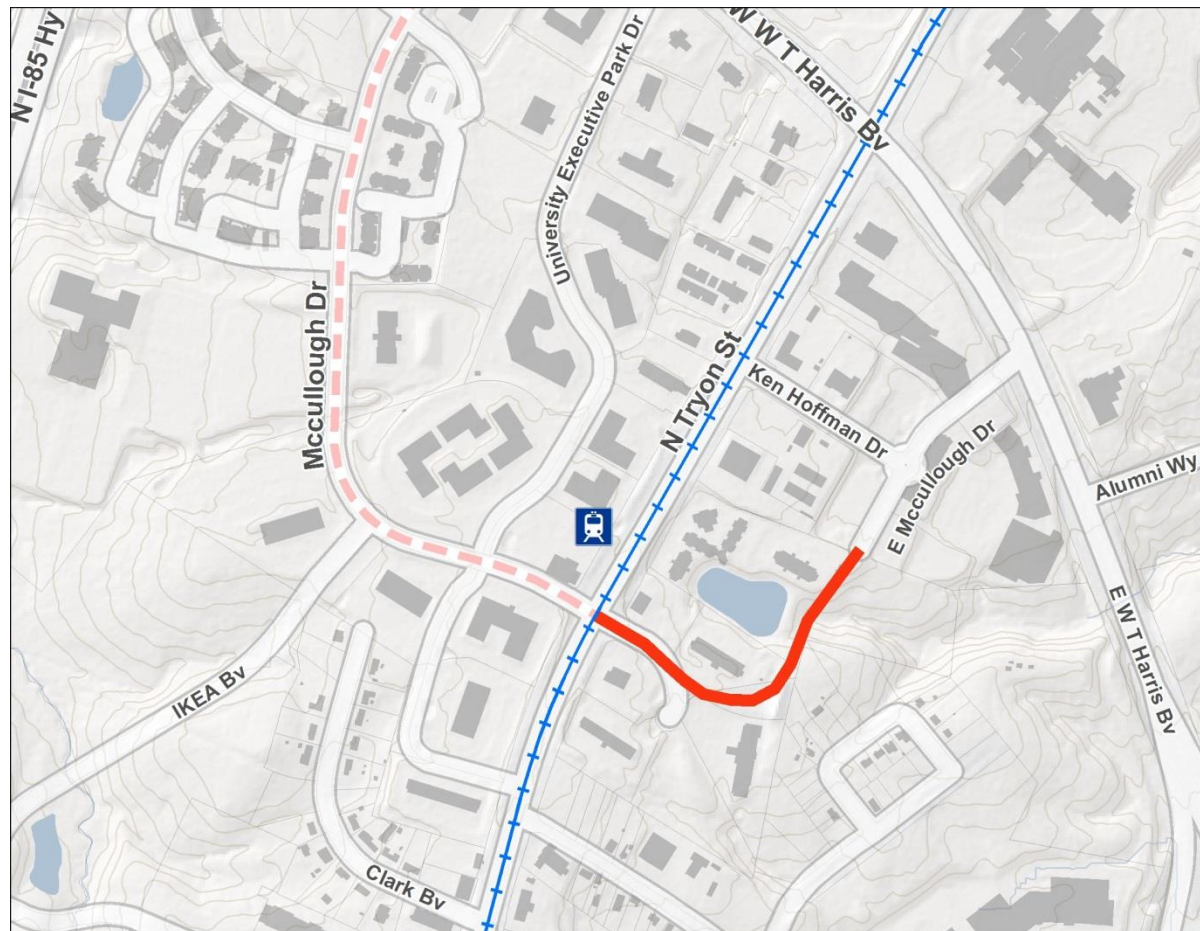
Rocky River Road West Street Improvements

- Provides connection for several neighborhoods to access the LYNX BLE station
- Connects N. Tryon to Toby Creek Greenway



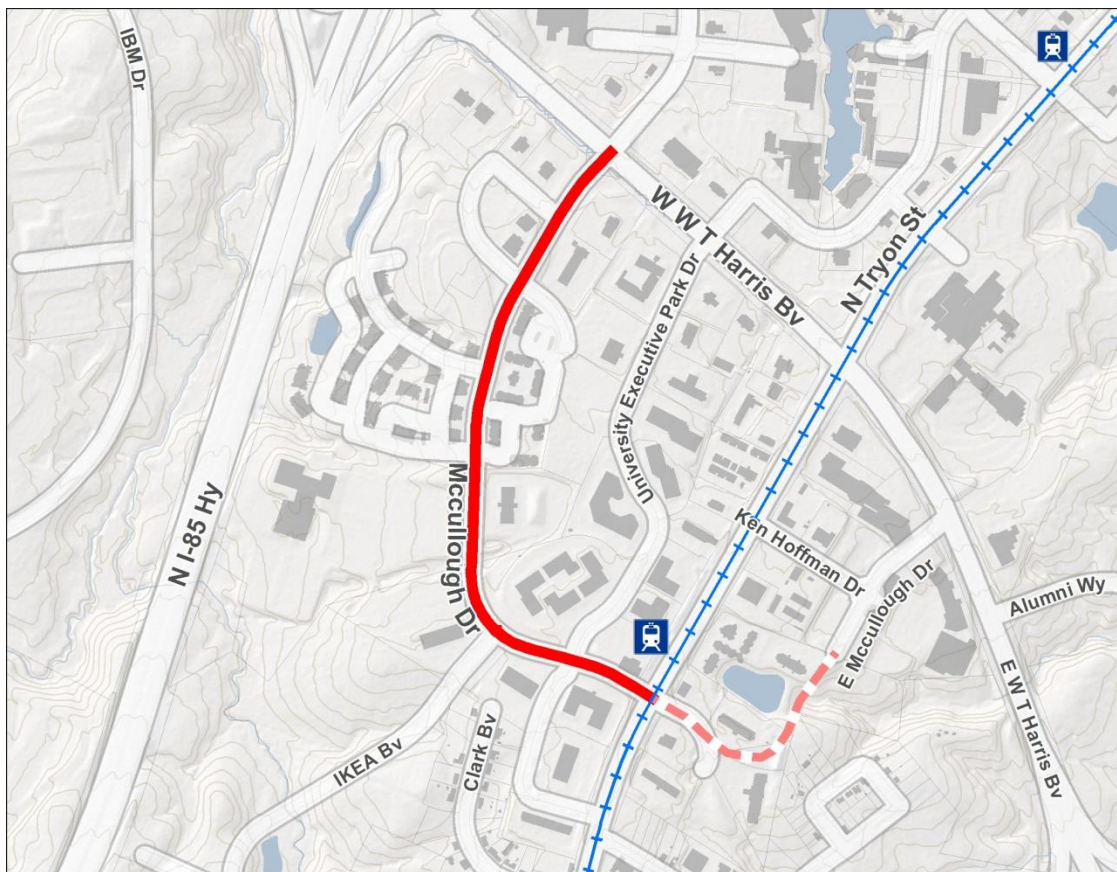
McCullough Drive Extension

- Extension connects McCullough to Harris Blvd.
- Improves vehicle, pedestrian and bicycle access and circulation



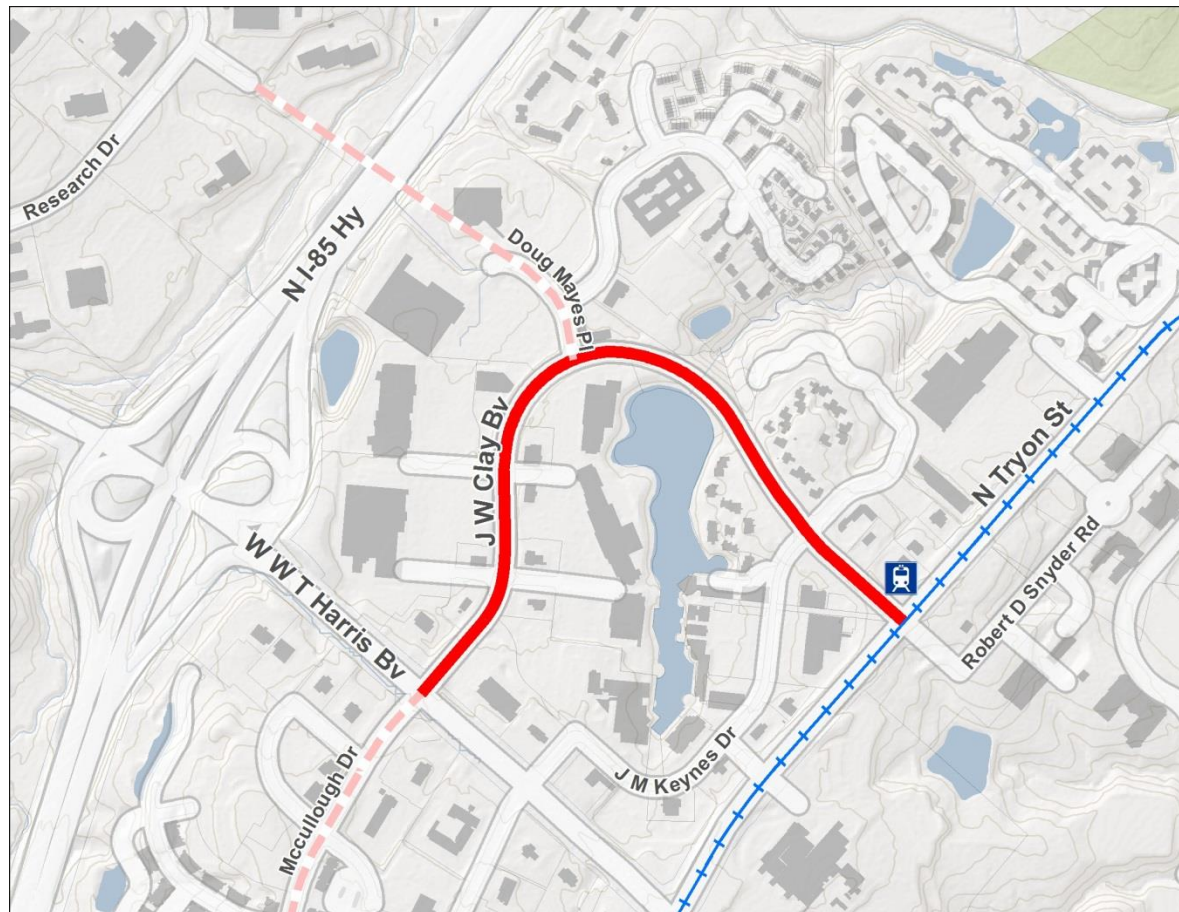
McCullough Drive Streetscape

- Street improvements may include bicycle lanes, sidewalks, landscaping, lighting and crosswalks.
- Project includes improved connection to IKEA Boulevard.



JW Clay Streetscape

- Street improvements may include bicycle lanes, sidewalks, landscaping, lighting and crosswalks.
- Project to include tie-in to Barton Creek Greenway.



What's next?

- Planning contracts
- Schedule
- Public meetings for specific projects
- Future BLE updates, Cross Charlotte Trail meetings

How You Can Get Involved

You are invited to be a part of the process of building Charlotte's future. To remain a vibrant city where people want to live and work, Charlotte needs your ideas and voice.

We encourage you to:

- Attend meetings
- Share your ideas
- Participate in surveys
- Collaborate with City planners and project managers

Visit www.charlottefuture.com to learn more and to sign up to receive regular updates.

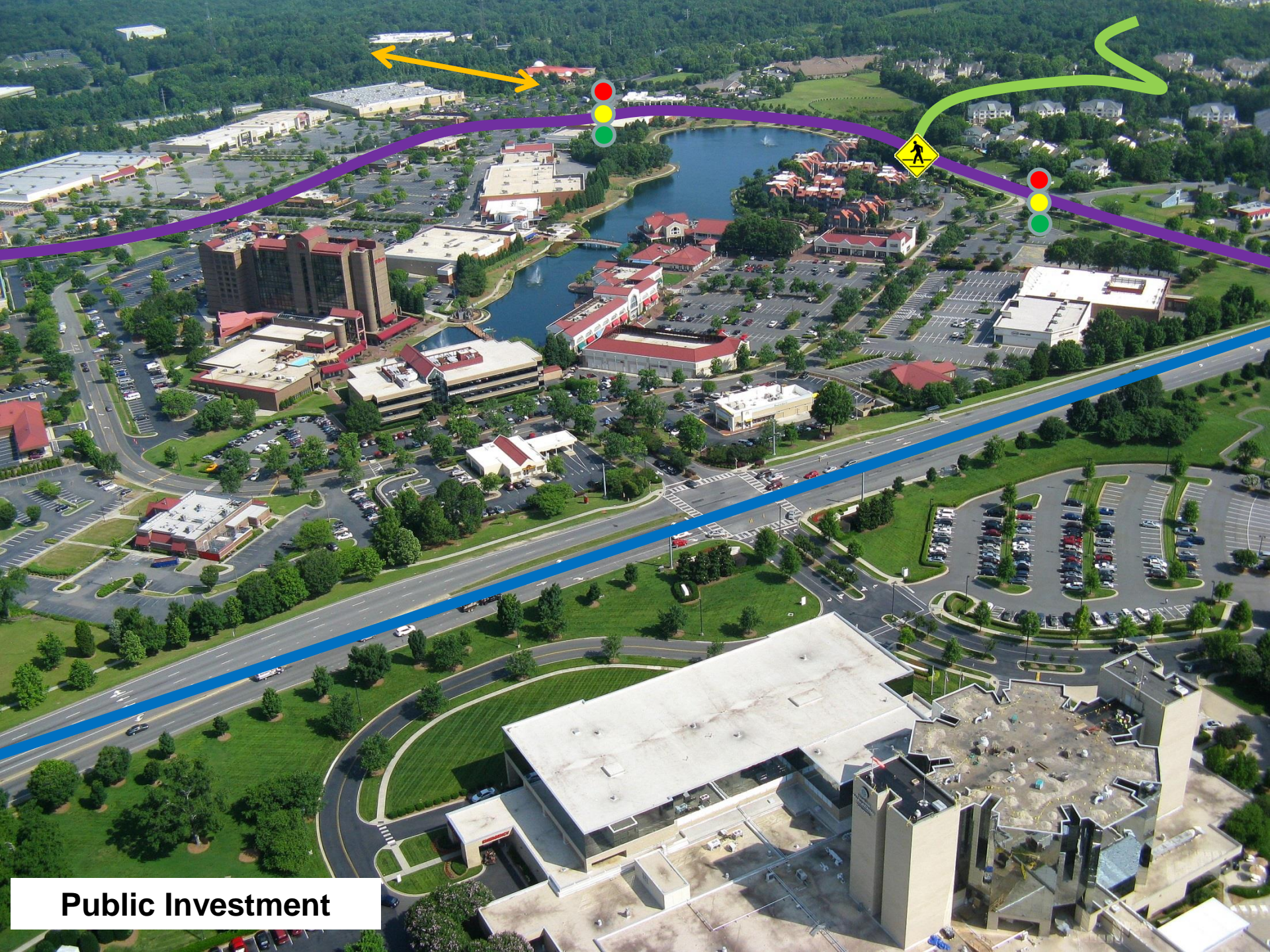


Tool used to:

- Identify and provide policies to address development opportunities and issues
- Identify public and private investments needed to achieve vision
- Possibly recommend zoning changes in appropriate locations
- Guide more appropriate development



Existing Conditions

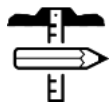


Public Investment

JW Clay Blvd./UNC Charlotte Transit Station Area



- University City's town center
- Destination for shopping, working, living, and entertainment



- Urban in form
- Active street fronts
- Build off existing assets



- Enhance pedestrian and bicycle network
- New local streets and bridge



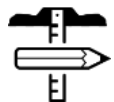
- Consolidate required open space
- Enhance existing features
- Future Barton Creek Greenway



UNC Charlotte and CMC University



- Established anchors
- Variety of uses adjacent to station



- Cohesive corridors
- Urban form adjacent to the station



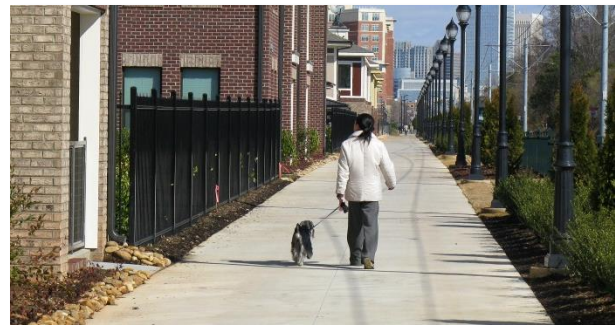
- Connection between the hospital and the university
- Sidewalks along University Hospital Dr.



- Open space and walking trails
- Link to the Toby Creek Greenway



TOD in Charlotte: A compact neighborhood with housing, jobs, and neighborhood services within easy walking distance of a transit station.



Characteristics of TOD Zoning

- Limits or prohibits auto-oriented uses.
- Requires new development to provide wide sidewalks (typically 8 feet) with 8 ft. planting strips and street trees.
- Minimum density requirements to discourage sprawl.
- Maximum parking requirement to reduce the number of parking spaces allowed.
- Pedestrian connectivity and open space requirements.
- Building design standards to activate and animate the public realm, such as limiting blank walls along sidewalks, requiring clear glass windows and doors.
- Encouraging mixed-use development to put services and shopping within easy walking distance of residential uses.

Thank you!
Questions?